BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Improvements to roads and drains at SFS 407 and surrounding areas in ward no:03 Yelahanka Satellite Town sub Division

JOB NUMBER.:							GO.No-1517	Est. Amount =	200.00	Lakhs
Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity		Rate in Rs.	Amount in Rs.
1	Removing and resetting of footpath slab									
	KPWD S.R 2018-19	It. No.	37.56				Pg.No.	270		
	Ch:00-200 3rd Main Road		2		170.00	1.20		408.00		
	Ch:200-380		2		153.00	1.20		367.20		
	Ch:380-530		2		127.00	1.20		304.80		
	Ch:00-170 Connecting Road		2		144.00	1.00		288.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		221.00	1.00		442.00		
	Ch:00-215 4rd Main Road		2		183.00	1.20		439.20		
	Ch:215-515		2		255.00	1.20		612.00		
	Ch:515-690		2		149.00	1.20		357.60		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		2		149.00	0.90		268.20		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)		2		170.00	0.90		306.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		119.00	0.90		214.20		
							Total Qty	4007.20	208.82	8,36,783.50
2	Removing and resetting of kerb stones									
	KPWD S.R 2018-19	It. No.	37.57.				Pg.No.	270		
	Ch:00-200 3rd Main Road		2		170.00			340.00		
	Ch:200-380		2		153.00			306.00		
	Ch:380-530		2		127.00			254 00		
	Ch:00-170 Connecting Road		2		144.00			288.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		221.00			442.00		
	Ch:00-215 4rd Main Road		2		183.00			366.00		
	Ch:215-515		2		255.00			510.00		
	Ch:515-690		2		149.00			298.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		119.00			238.00		
							Total Qty	3042.00	104.94	3,19,227.48
3	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specificationsand as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	19.10				Pg.No.	130		
	Desilting of Drain									
	Ch:00-200 3rd Main Road		2		200.00	0.50	0.60	120.00		
	Ch:200-380		2		180.00	0.50	0.60	108.00		
	Ch:380-530		2		150.00	0.50	0.60	90.00		
	Ch:00-170 Connecting Road		2		170.00	0.50	0.60	102.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		260.00	0.50	0.60	156.00		
	Ch:00- 30 V Shape Road (Approach)		2		30.00	0.50	0.60	18.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-215 4rd Main Road	Cum	2		215.00	0.50	0.60	129.00		
	Ch:215-515		2		300.00	0.50	0.60	180.00		
	Ch:515-690		2		175.00	0.50	0.60	105.00		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		2		175.00	0.50	0.60	105.00		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)		2		200.00	0.50	0.60	120.00		
	Ch:00- 240 1st B Main Road (Kuvempu Road)		2		240.00	0.50	0.60	144.00		
	Ch:00- 420 1st A main (Shivarudrappa Road)		2		420.00	0.50	0.60	252.00		
	Ch:00- 110 Connecting Road		2		110.00	0.50	0.60	66.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		140.00	0.50	0.60	84.00		
	Ch:00- 130 7th Cross Road (Connecting Road)		2		130.00	0.50	0.60	78.00		
	Ch:00- 150 5th Cross Road (1st A Main Road)		2		150.00	0.50	0.60	90.00		
	Ch:00- 120 Connecting Road		2		120.00	0.50	0.60	72.00		
	New Culverts									
	Cross Roads		6		7.50	1.50	1.20	81.00		
	New Kerb									
	Ch:00-200 3rd Main Road		2		30.00	0.20	0.20	2.40		
	Ch:200-380		2		27.00	0.20	0.20	2.16		
	Ch:380-530		2		23.00	0.20	0.20	1.84		
	Ch:00-170 Connecting Road		2		26.00	0.20	0.20	2.08		
	Ch:00- 260 2nd Main Road (Link Road)		2		39.00	0.20	0.20	3.12		
	Ch:00-215 4rd Main Road		2		32.00	0.20	0.20	2.56		
	Ch:215-515		2		45.00	0.20	0.20	3.60		
	Ch:515-690		2		26.00	0.20	0.20	2.08		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		21.00	0.20	0.20	1.68		
	Block wall for Tree's Surrounding									
	SFS 407 and surrounding areas		40	2	4.00	0.20	0.30	19.20		
							Total Qty	**2140.72**	**211.79**	**4,53,378.81**
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete Cum of Mix 1:3:6 with OPC @ 220kgs, with 40mm anddown size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1,4.2									
	KPWD S.R 2018-19	It. No.			4.2.		Pg.No.	13		
	New Culverts									
	Cross Roads		6		7.50	1.50	0.15	10.13		
	New Kerb							0.00		
	Ch:00-200 3rd Main Road		2		30.00	0.20	0.10	1.20		
	Ch:200-380		2		27.00	0.20	0.10	1.08		
	Ch:380-530		2		23.00	0.20	0.10	0.92		
	Ch:00-170 Connecting Road		2		26.00	0.20	0.10	1.04		
	Ch:00- 260 2nd Main Road (Link Road)		2		39.00	0.20	0.10	1.56		
	Ch:00-215 4rd Main Road		2		32.00	0.20	0.10	1.28		
	Ch:215-515		2		45.00	0.20	0.10	1.80		
	Ch:515-690		2		26.00	0.20	0.10	1.04		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		21.00	0.20	0.10	0.84		
	Block wall for Tree's Surrounding									
	SFS 407 and surrounding areas		40	2	4.00	0.20	0.10	6.40		
							Total Qty	**27.29**	**5505.64**	**1,50,248.92**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
5	Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	28.8.2		Pg.No.	229			
	One cubic mt 90kg For Culvert	T	1		2.11		2.11		
						Total Qty	2.11	72326.98	1,52,609.93
6	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.								
	KPWD S.R 2018-19	It. No.	37.59.2.		Pg.No.	271			
	New Culverts								
	Bottom Slab	cum	6	1	7.50	1.20	0.20	10.80	
	Side Walls		6	2	7.50	0.20	0.70	12.60	
							Total Qty	23.40	7070.20	1,65,442.68
7	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	Approved Data Rate								
	Damaged Portion of Drain								
	Ch:00-200 3rd Main Road	Sqm	2		30.00	1.20		72.00		
	Ch:200-380		2		27.00	1.20		64.80		
	Ch:380-530		2		23.00	1.20		55.20		
	Ch:00-170 Connecting Road		2		26.00	1.00		52.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		39.00	1.00		78.00		
	Ch:00-215 4rd Main Road		2		32.00	1.20		76.80		
	Ch:215-515		2		45.00	1.20		108.00		
	Ch:515-690		2		26.00	1.20		62.40		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		2		26.00	0.90		46.80		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)		2		30.00	0.90		54.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		21.00	0.90		37.80		
							Total Qty	707.80	2337.00	16,54,128.60
8	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)								
	Approved Data Rate								
	New Culverts								
	Cross Roads	Sqm	6		7.50	1.20		54.00		
							Total Qty	54.00	5418.00	2,92,572.00
9	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete as per specifications and as per directions of Engineer in charge of work.								
	Approved Data Rate								
	New Kerb								
	Ch:00-200 3rd Main Road		2		67.00			134.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:200-380	Nos	2		60.00			120.00		
	Ch:380-530		2		51.00			102.00		
	Ch:00-170 Connecting Road		2		58.00			116.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		87.00			174.00		
	Ch:00-215 4rd Main Road		2		71.00			142.00		
	Ch:215-515		2		100.00			200.00		
	Ch:515-690		2		58.00			116.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		47.00			94.00		
							Total Qty	1198.00	477.00	5,71,446.00
10	KSRB 5-14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KPWD S.R 2018-19 It. No. 5.27.1. Pg.No. 27									
	Block wall for Tree's Surrounding									
	SFS 407 and surrounding areas	Sqm	40	2	4.00		0.40	128.00		
							Total Qty	128.00	984.96	1,26,074.88
11	KSRB15-3.7 : Providing 18mm thick cement plaster in singlecoat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications KPWD S.R 2018-19 It. No. 15.15. Pg.No. 116									
	Block wall for Tree's Surrounding									
	SFS 407 and surrounding areas	Sqm	40	2	4.00		0.80	256.00		
							Total Qty	256.00	298.08	76,308.48
12	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications and as per directoins of the Engineer in charge of work. KPWD S.R 2018-19 It. No. 24.1. Pg.No. 180									
	New Kerb									
	Ch:00-200 3rd Main Road	Sqm	2		200.00	0.50		200.00		
	Ch:200-380		2		180.00	0.50		180.00		
	Ch:380-530		2		150.00	0.50		150.00		
	Ch:00-170 Connecting Road		2		170.00	0.50		170.00		
	Ch:00- 260 2nd Main Road (Link Road)		2		260.00	0.50		260.00		
	Ch:00-215 4rd Main Road		2		215.00	0.50		215.00		
	Ch:215-515		2		300.00	0.50		300.00		
	Ch:515-690		2		175.00	0.50		175.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		2		140.00	0.50		140.00		
	Block wall for Tree's Surrounding					0.50				
	SFS 407 and surrounding areas		40	2	4.00	0.50		160.00		
							Total Qty	1950.00	84.80	1,65,360.00
13	Providing and laying heavy duty cobble stones interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications and as per directoins of the Engineer in charge of work. KPWD S.R 2018-19 It. No. 14.60 Pg.No. 103									
	Ch:00-690 4th Main Road	sqm	2		205.00	0.50		205.00		
	Ch:00-530 3rd Main Road		2		150.00	0.50		150.00		
							Total Qty	355.00	1116.18	3,96,243.90

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
14	KSRB 4-1.1: Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 40mm and down size grade granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications Specification No. KBS 4.1,4.2								
	KPWD S.R 2018-19	It. No.	4.1.			Pg.No.	13		
	For Footpath Side Concrete	cum							
	Ch:00-690 4th Main Road		2		390.00	0.50	0.10	39.00	
							Total Qty	**39.00**	**5599.98**	**2,18,399.22**
15	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	19.14			Pg.No.	143		
	Earth for Road	Cum							
	Road Across Cuttings		30		6.80	0.30	0.35	21.42	
			36		8.00	0.30	0.35	30.24	
	Pot Holes		51		1.00	1.20	0.35	21.42	
							Total Qty	**73.08**	**57.03**	**4,167.61**
16	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.6			Pg.No.	153		
	GSB For Road	Cum.							
	Road Across Cuttings		30		6.80	0.30	0.15	9.18	
			36		8.00	0.30	0.15	12.96	
	Pot Holes		51		1.00	1.20	0.15	9.18	
							Total Qty	**31.32**	**1855.00**	**58,098.60**
17	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.18			Pg.No.	155		
	Wet Mix	Cum							
	Road Across Cuttings		30		6.80	0.30	0.20	12.24	
			36		8.00	0.30	0.20	17.28	
	Pot Holes		51		1.00	1.20	0.20	12.24	
							Total Qty	**41.76**	**2001.28**	**83,573.45**
18	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	19.64			Pg.No.	147		
	Compaction	Sqm							
	Road Across Cuttings		30		6.80	0.30		61.20	
			36		8.00	0.30		86.40	
	Pot Holes		51		1.00	1.20		61.20	
							Total Qty	**208.80**	**6.36**	**1,327.97**
19	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.6			Pg.No.	158		
	Primer Coat	sqm							
	Road Across Cuttings		30		6.80	0.30		61.20	
			36		8.00	0.30		86.40	
	Pot Holes		51		1.00	1.20		61.20	
							Total Qty	**208.80**	**33.92**	**7,082.50**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
20	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.20		Pg.No.	158			
	Cleaning								
	Ch:00-200 3rd Main Road		1	200.00	8.50		1700.00		
	Ch:200-380		1	180.00	8.00		1440.00		
	Ch:380-530		1	150.00	7.50		1125.00		
	Ch:00-170 Connecting Road		1	170.00	6.00		1020.00		
	Ch:00- 260 2nd Main Road (Link Road)		1	260.00	7.00		1820.00		
	Ch:00- 30 V Shape Road (Approach)		2	30.00	7.00		420.00		
	Ch:00-215 4rd Main Road		1	215.00	7.50		1612.50		
	Ch:215-515		1	300.00	7.50		2250.00		
	Ch:515-690		1	175.00	7.50		1312.50		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		1	175.00	4.50		787.50		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)	Sqm	1	200.00	7.50		1500.00		
	Ch:00- 240 1st B Main Road (Kuvempu Road)		1	240.00	5.50		1320.00		
	Ch:00- 420 1st A main (Shivarudrappa Road)		1	420.00	4.80		2016.00		
	Ch:00- 110 Connecting Road		1	110.00	4.80		528.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		1	140.00	5.20		728.00		
	Ch:00- 130 7th Cross Road (Connecting Road)		1	130.00	5.20		676.00		
	Ch:00- 150 5th Cross Road (1st A Main Road)		1	150.00	5.20		780.00		
	Ch:00- 120 Connecting Road		1	120.00	5.20		624.00		
						Total Qty	**21659.50**	**5.30**	**1,14,795.35**
21	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch mix plant with sensor paver Gr-I I Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision.								
	KPWD S.R 2018-19	It. No.	21.17.2		Pg.No.	160			
	Road Across Cuttings		30	6.80	0.30	0.05	3.06		
			36	8.00	0.30	1.05	90.72		
	Pot Holes		51	1.00	1.20	0.05	3.06		
	Profile Comber Correction								
	Tack Coat Qty *15%		1	21659.50		0.05	162.45		
						Total Qty	**259.29**	**7620.34**	**19,75,877.96**
22	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.7.		Pg.No.	158			
	Tack Coat For Road								
	Ch:00-200 3rd Main Road		1	200.00	8.50		1700.00		
	Ch:200-380		1	180.00	8.00		1440.00		
	Ch:380-530		1	150.00	7.50		1125.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate In Rs.	Amount In Rs.
	Ch:00-170 Connecting Road		1		170.00	6.00		1020.00		
	Ch:00- 260 2nd Main Road (Link Road)		1		260.00	7.00		1820.00		
	Ch:00- 30 V Shape Road (Approach)		2		30.00	7.00		420.00		
	Ch:00-215 4rd Main Road		1		215.00	7.50		1612.50		
	Ch:215-515		1		300.00	7.50		2250.00		
	Ch:515-690		1		175.00	7.50		1312.50		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		1		175.00	4.50		787.50		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)		1		200.00	7.50		1500.00		
	Ch:00- 240 1st B Main Road (Kuvempu Road)		1		240.00	5.50		1320.00		
	Ch:00- 420 1st A main (Shivarudrappa Road)	Sqm	1		420.00	4.80		2016.00		
	Ch:00- 110 Connecting Road		1		110.00	4.80		528.00		
	Ch:00- 140 7th Cross Road (1st Main Road)		1		140.00	5.20		728.00		
	Ch:00- 130 7th Cross Road (Connecting Road)		1		130.00	5.20		676.00		
	Ch:00- 150 5th Cross Road (1st A Main Road)		1		150.00	5.20		780.00		
	Ch:00- 120 Connecting Road		1		120.00	5.20		624.00		
							Total Qty	21659.50	12.72	2,75,508.84
23	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.									
	KPWD S.R 2018-19	It. No.	21.78.12			Pg.No.	171			
	BC Overlay									
	Ch:00-200 3rd Main Road		1		200.00	8.50	0.04	68.00		
	Ch:200-380		1		180.00	8.00	0.04	57.60		
	Ch:380-530		1		150.00	7.50	0.04	45.00		
	Ch:00-170 Connecting Road		1		170.00	6.00	0.04	40.80		
	Ch:00- 260 2nd Main Road (Link Road)		1		260.00	7.00	0.04	72.80		
	Ch:00- 30 V Shape Road (Approach)		2		30.00	7.00	0.04	16.80		
	Ch:00-215 4rd Main Road		1		215.00	7.50	0.04	64.50		
	Ch:215-515		1		300.00	7.50	0.04	90.00		
	Ch:515-690		1		175.00	7.50	0.04	52.50		
	Ch:00- 175 2nd B Main Road (SL Byrappa Road)		1		175.00	4.50	0.04	31.50		
	Ch:00- 200 2nd Main Road (Shivarama Karanth Road)	Cum	1		200.00	7.50	0.04	60.00		
	Ch:00- 240 1st B Main Road (Kuvempu Road)		1		240.00	5.50	0.04	52.80		
	Ch:00- 420 1st A main (Shivarudrappa Road)		1		420.00	4.80	0.04	80.64		
	Ch:00- 110 Connecting Road		1		110.00	4.80	0.04	21.12		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00- 140 7th Cross Road (1st Main Road)		1		140.00	5.20	0.04	29.12		
	Ch:00- 130 7th Cross Road (Connecting Road)		1		130.00	5.20	0.04	27.04		
	Ch:00- 150 5th Cross Road (1st A Main Road)		1		150.00	5.20	0.04	31.20		
	Ch:00- 120 Connecting Road		1		120.00	5.20	0.04	24.96		
							Total Qty	866.38	8699.42	75,37,003.50
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.		48.3		Pg.No.	182			
	Edge lane	Sqm								
	Road Both Side		1	2	3365.00	0.15		1009.50		
	Road Centre		1	1	1682.50	0.10		168.25		
							Total Qty	1177.75	454.74	5,35,570.04
25	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.									
	KPWD S.R 2018-19	It. No.		24.41.		Pg.No.	187			
	Edge lane	sqm								
	Road Both Side		1	2	463.33			926.67		
	Road Centre		1	1	463.33			463.33		
							Total Qty	1390.00	357.22	4,96,535.80
26	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete, as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender.									
	KPWD S.R 2018-19	It. No.		24.59.		Pg.No.	190			
	Edge lane	sqm								
	Road Both Side		2		1.60	0.90		2.88		
	Road Centre									
							Total Qty	2.88	14094.82	40,593.08

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
27	Direction and Place Identification Signs with size morethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high i ntensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.								
	KPWD S.R 2018-19	It. No.		24.4.	Pg.No.	180			
	Edge lane								
	Road Both Side	sqm	7	0.90	0.90		5.67		
	Road Centre								
						Total Qty	5.67	7557.80	42,852.73
								Total Construtions cost	167,51,211.83
								GST 12%	20,10,145.42
								Design Report,Proof Checking & PMC Amount	4,00,000.00
								Tender Premium 5%	8,37,560.59
								Sub Total	199,98,917.84
								Miscellaneous & Rounding Off	1,082.16
								Grand Total	200,00,000.00

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SRI SAI CONSULTANTS BANGALORE-90

Consultant
For Sri Sai Consultants

Assistant Engineer
Ward-03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Improvements to roads and drains at yelahanka newtown 4th phase and surrounding areas in ward no:03 Yelahanka Satellite Town sub Division

JOB NUMBER.:						GO.No-1518	Est. Amount =	200.00	Lakhs
Sl. No	Description of Work	Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
1	Removing and resetting of footpath slab								
	KPWD S.R 2018-19	It. No.	37.56		Pg.No.	270			
	Ch:00-250 1st Main Road	sqm	2	225.00	1.00		450.00		
	Ch:00-500 From BMTC Bus Stop		2	450.00	1.20		1080.00		
	Ch:00-100 Pragathi Nursery School		2	90.00	0.90		162.00		
	Ch:00-360 Manjushre Bekary Front Road		2	324.00	0.90		583.20		
	Ch:00-170 J.K Naidu School Front Road		2	153.00	1.20		367.20		
	Ch:00-420 Neha Prakash Hospital Front Road		2	378.00	1.20		907.20		
	Ch:00-175 Girls Hostel Front Road		2	157.00	1.20		376.80		
	Ch:00-400 BMTC Left side Road		2	360.00	1.20		864.00		
						Total Qty	4790.40	208.82	10,00,331.33
2	Removing and resetting of kerb stones								
	KPWD S.R 2018-19	It. No.	37.57.		Pg.No.	270			
	Ch:00-250 1st Main Road	M	2	225.00			450.00		
	Ch:00-500 From BMTC Bus Stop		2	450.00			900.00		
	Ch:00-170 J.K Naidu School Front Road		2	153.00			306.00		
	Ch:00-420 Neha Prakash Hospital Front Road		2	378.00			756.00		
	Ch:00-175 Girls Hostel Front Road		2	157.00			314.00		
	Ch:00-500 BMTC Left side Road		2	360.00			720.00		
						Total Qty	3446.00	104.94	3,61,623.24
3	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specificationsand as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	19.10		Pg.No.	130			
	Desilting of Drain	Cum							
	Ch:00-250 1st Main Road		2	250.00	0.50	0.60	150.00		
	Ch:00-370 4th Main Road		2	370.00	0.50	0.60	222.00		
	Ch:00-370 Manjunath Condiments Front Road		2	370.00	0.50	0.60	222.00		
	Ch:00-500 From BMTC Bus Stop		2	500.00	0.50	0.60	300.00		
	Ch:00-100 Pragathi Nursery School		2	100.00	0.50	0.60	60.00		
	Ch:00-360 Manjushre Bekary Front Road		2	360.00	0.50	0.60	216.00		
	Ch:00-170 J.K Naidu School Front Road		2	170.00	0.50	0.60	102.00		
	Ch:00-420 Neha Prakash Hospital Front Road		2	420.00	0.50	0.60	252.00		
	Ch:00-175 Girls Hostel Front Road		2	175.00	0.50	0.60	105.00		
	Ch:00-500 BMTC Left side Road		2	500.00	0.50	0.60	300.00		
	New Culverts								
	Cross Roads		7	7.50	1.50	1.20	94.50		
	New Kerb								
	Ch:00-250 1st Main Road		2	25.00	0.20	0.20	2.00		
	Ch:00-500 From BMTC Bus Stop		2	50.00	0.20	0.20	4.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-170 J.K Naidu School Front Road		2		17.00	0.20	0.20	1.36		
	Ch:00-420 Neha Prakash Hospital Front Road		2		42.00	0.20	0.20	3.36		
	Ch:00-175 Girls Hostel Front Road		2		18.00	0.20	0.20	1.44		
	Ch:00-500 BMTC Left side Road		2		40.00	0.20	0.20	3.20		
	Block wall for Tress Surrounding									
	4th phase and surrounding areas		10	2	4.00	0.20	0.30	4.80		
			15	2	4.00	0.20	0.30	7.20		
							Total Qty	**2050.86**	**211.79**	**4,34,347.54**
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete Cum of Mix 1:3:6 with OPC @ 220kgs, with 40mm anddown size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1,4.2									
	KPWD S.R 2018-19	It. No.	4.2.		Pg.No.	13				
	New Culverts									
	Cross Roads		7		7.50	1.50	0.15	11.81		
	New Kerb									
	Ch:00-250 1st Main Road		2		25.00	0.20	0.10	1.00		
	Ch:00-500 From BMTC Bus Stop		2		50.00	0.20	0.10	2.00		
	Ch:00-170 J.K Naidu School Front Road		2		17.00	0.20	0.10	0.68		
	Ch:00-420 Neha Prakash Hospital Front Road	cum	2		42.00	0.20	0.10	1.68		
	Ch:00-175 Girls Hostel Front Road		2		18.00	0.20	0.10	0.72		
	Ch:00-500 BMTC Left side Road		2		40.00	0.20	0.10	1.60		
	Block wall for Tress Surrounding									
	4th phase and surrounding areas		10	2	4.00	0.20	0.10	1.60		
			15	2	4.00	0.20	0.10	2.40		
							Total Qty	**23.49**	**5505.64**	**1,29,327.48**
5	Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	28.8.2		Pg.No.	229				
	One cubic mt 90kg For Culvert	T	1		2.46			2.46		
							Total Qty	**2.46**	**72326.98**	**1,77,924.37**
6	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.									
	KPWD S.R 2018-19	It. No.	37.59.1.		Pg.No.	271				
	New Culverts									
	Bottom Slab	cum	7	1	7.50	1.20	0.20	12.60		
	Side Walls		7	2	7.50	0.20	0.70	14.70		
							Total Qty	**27.30**	**7070.20**	**1,93,016.46**
7	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)									
	Approved Data Rate									
	Damaged Portion of Drain									
	Ch:00-250 1st Main Road		2		25.00	1.00		50.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate In Rs.	Amount in Rs.
	Ch:00-500 From BMTC Bus Stop	Sqm	2		50.00	1.20		120.00		
	Ch:00-100 Pragathi Nursery School		2		10.00	0.90		18.00		
	Ch:00-360 Manjushre Bekary Front Road		2		36.00	0.90		64.80		
	Ch:00-170 J.K Naidu School Front Road		2		17.00	1.20		40.80		
	Ch:00-420 Neha Prakash Hospital Front Road		2		42.00	1.20		100.80		
	Ch:00-175 Girls Hostel Front Road		2		18.00	1.20		43.20		
	Ch:00-400 BMTC Left side Road		2		40.00	1.20		96.00		
							Total Qty	533.60	2337.00	12,47,023.20
8	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)									
	Approved Data Rate									
	New Culverts									
	Cross Roads	Sqm	7		7.50	1.20		63.00		
							Total Qty	63.00	5418.00	3,41,334.00
9	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2.4 and finished with CM 1:3 plastering and finishing cutting etc., complete as per specifications and as per directions of Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	5.29.1		Pg.No.	27				
	New Kerb for Damaged Portion	Nos								
	Ch:00-250 1st Main Road		2		56.00			112.00		
	Ch:00-500 From BMTC Bus Stop		2		111.00			222.00		
	Ch:00-170 J.K Naidu School Front Road		2		38.00			76.00		
	Ch:00-420 Neha Prakash Hospital Front Road		2		93.00			186.00		
	Ch:00-175 Girls Hostel Front Road		2		40.00			80.00		
	Ch:00-500 BMTC Left side Road		2		89.00			178.00		
							Total Qty	854.00	477.00	4,07,358.00
10	KSRB 5-14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications.									
	KPWD S.R 2018-19	It. No.	5.27.1.		Pg.No.	27				
	Block wall for Tress Surrounding	Sqm								
	4th phase and surrounding areas		10	2	4.00		0.40	32.00		
			15	2	4.00		0.40	48.00		
							Total Qty	80.00	984.96	78,796.80
11	KSRB15-3.7 : Providing 18mm thick cement plaster in singlecoat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications									
	KPWD S.R 2018-19	It. No.	15.15.		Pg.No.	116				
	Block wall for Tress Surrounding	Sqm								
	4th phase and surrounding areas		10	2	4.00		0.80	64.00		
			15	2	4.00		0.80	96.00		
							Total Qty	160.00	298.08	47,692.80
12	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	24.1.		Pg.No.	180				
	New Kerb									

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-250 1st Main Road	Sqm	2		250.00	0.50		250.00		
	Ch:00-500 From BMTC Bus Stop		2		500.00	0.50		500.00		
	Ch:00-170 J.K Naidu School Front Road		2		170.00	0.50		170.00		
	Ch:00-420 Neha Prakash Hospital Front Road		2		420.00	0.50		420.00		
	Ch:00-175 Girls Hostel Front Road		2		175.00	0.50		175.00		
	Ch:00-500 BMTC Left side Road		2		500.00	0.50		500.00		
	Block wall for Tress Surrounding									
	4th phase and surrounding areas		10	2	4.00	0.80		64.00		
			15	2	4.00	0.80		96.00		
							Total Qty	**2175.00**	**84.80**	**1,84,440.00**
13	KSRB 4-1.1: Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 40mm and down size grade granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications Specification No. KBS 4.1,4.2									
	KPWD S.R 2018-19	It. No.	4.1.			Pg.No.	13			
	For Footpath Side Concrete	Cum								
	Ch:00-250 1st Main Road		2		120.00	0.50	0.10	12.00		
	Ch:00-390 From BMTC Bus Stop		2		195.00	0.50	0.10	19.50		
	Ch:00-170 J.K Naidu School Front Road		2		80.00	0.60	0.10	9.60		
	Ch:00-500 BMTC Left side Road		2		200.00	0.60	0.10	24.00		
							Total Qty	**65.10**	**5599.98**	**3,64,558.70**
14	Providing and laying heavy duty cobble stones interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	21.6			Pg.No.	158			
	Cobble stone for damaged portion	sqm								
	Ch:00-500 From BMTC Bus Stop		2		200.00	0.50		200.00		
							Total Qty	**200.00**	**1116.18**	**2,23,236.00**
15	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19	It. No.	19.14			Pg.No.	143			
	Earth Work	Cum								
	Road Across Cuttings		40		7.00	0.30	0.35	29.40		
			41		8.50	0.30	0.35	36.59		
	Pot Holes		44		0.80	1.00	0.35	12.32		
							Total Qty	**78.31**	**57.03**	**4,465.86**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
16	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.6		Pg.No.	153			
	GSB For Road								
	Road Across Cuttings	Cum.	40	7.00	0.30	0.15	12.60		
			41	8.50	0.30	0.15	15.68		
	Pot Holes		44	0.80	1.00	0.15	5.28		
						Total Qty	33.56	1855.00	62,253.80
17	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.18		Pg.No.	155			
	Wet Mix								
	Road Across Cuttings	Cum	40	7.00	0.30	0.20	16.80		
			41	8.50	0.30	0.20	20.91		
	Pot Holes		44	0.80	1.00	0.20	7.04		
						Total Qty	44.75	2001.28	89,557.28
18	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	19.64		Pg.No.	147			
	Compaction								
	Road Across Cuttings	Sqm	40	7.00	0.30		84.00		
			41	8.50	0.30		104.55		
	Pot Holes		44	0.80	1.00		35.20		
						Total Qty	223.75	6.36	1,423.05
19	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.6		Pg.No.	158			
	DBM								
	Road Across Cuttings	sqm	40	7.00	0.30		84.00		
			41	8.50	0.30		104.55		
	Pot Holes		44	0.80	1.00		35.20		
						Total Qty	223.75	33.92	7,589.60
20	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.20		Pg.No.	158			
	Cleaning								
	Ch:00-250 1st Main Road	Sqm	1	250.00	6.00		1500.00		
	Ch:00-370 4th Main Road		1	370.00	6.50		2405.00		
	Ch:00-370 Manjunath Condiments Front Road		1	370.00	6.00		2220.00		
	Ch:00-500 From BMTC Bus Stop		1	500.00	9.00		4500.00		
	Ch:00-100 Pragathi Nursery School		1	100.00	5.50		550.00		
	Ch:00-360 Manjushre Bekary Front Road		1	360.00	5.50		1980.00		
	Ch:00-170 J.K Naidu School Front Road		1	170.00	7.50		1275.00		

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-420 Neha Prakash Hospital Front Road		1	420.00	8.50		3570.00		
	Ch:00-175 Girls Hostel Front Road		1	175.00	5.00		875.00		
	Ch:00-500 BMTC Left side Road		1	500.00	8.50		4250.00		
						Total Qty	23125.00	5.30	1,22,562.50
21	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch mix plant with sensor paver Gr-I I Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision								
	KPWD S.R 2018-19	It. No.	21.17.2		Pg.No.	160			
	DBM	cum	40		7.00	0.30	0.05	4.20	
	Road Across Cuttings		41		8.50	0.30	1.05	109.78	
			44		0.80	1.00	0.05	1.76	
	Pot Holes								
	Camber Correction								
	Tack Coat Qty *15%			23125.00		0.05	173.44		
						Total Qty	289.18	7620.34	22,03,649.92
22	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.7.		Pg.No.	158			
	Tack Coat For Road	Sqm							
	Ch:00-250 1st Main Road		1	250.00	6.00		1500.00		
	Ch:00-370 4th Main Road		1	370.00	6.50		2405.00		
	Ch:00-370 Manjunath Condiments Front Road		1	370.00	6.00		2220.00		
	Ch:00-500 From BMTC Bus Stop		1	500.00	9.00		4500.00		
	Ch:00-100 Pragathi Nursery School		1	100.00	5.50		550.00		
	Ch:00-360 Manjushre Bekary Front Road		1	360.00	5.50		1980.00		
	Ch:00-170 J.K Naidu School Front Road		1	170.00	7.50		1275.00		
	Ch:00-420 Neha Prakash Hospital Front Road		1	420.00	8.50		3570.00		
	Ch:00-175 Girls Hostel Front Road		1	175.00	5.00		875.00		
	Ch:00-500 BMTC Left side Road		1	500.00	8.50		4250.00		
						Total Qty	23125.00	12.72	2,94,150.00
23	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.								
	KPWD S.R 2018-19	It. No.	21.78.12.		Pg.No.	171			
	BC Overlay	Cum							
	Ch:00-250 1st Main Road		1	250.00	6.00	0.04	60.00		
	Ch:00-370 4th Main Road		1	370.00	6.50	0.04	96.20		
	Ch:00-370 Manjunath Condiments Front Road		1	370.00	6.00	0.04	88.80		
	Ch:00-500 From BMTC Bus Stop		1	500.00	9.00	0.04	180.00		
	Ch:00-100 Pragathi Nursery School		1	100.00	5.50	0.04	22.00		
	Ch:00-360 Manjushre Bekary Front Road		1	360.00	5.50	0.04	79.20		

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-170 J.K Naidu School Front Road		1	170.00	7.50	0.04	51.00		
	Ch:00-420 Neha Prakash Hospital Front Road		1	420.00	8.50	0.04	142.80		
	Ch:00-175 Girls Hostel Front Road		1	175.00	5.00	0.04	35.00		
	Ch:00-500 BMTC Left side Road		1	500.00	8.50	0.04	170.00		
						Total Qty	925.00	8699.42	80,46,963.50
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No. 48.3				Pg.No. 182			
	Edge lane	Sqm	1	2	3215.00	0.15	964.50		
	Road Both Side		1	1	1607.50	0.10	160.75		
	Road Centre						Total Qty 1125.25	454.74	5,11,696.19
25	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.								
	KPWD S.R 2018-19	It. No. 24.41.				Pg.No. 187			
	Pavement Markers	Nos	1	2	167.00		334.00		
	Road Both Side		1	1	56.00		56.00		
	Road Center						Total Qty 390.00	357.22	1,39,315.80
26	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete, as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender								
	KPWD S.R 2018-19	It. No. 24.59.				Pg.No. 190.00			
		sqm	2		1.6		0.90	2.88	
							Total Qty	2.88	14094.82	40,593.08

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
27	Direction and Place Identification Signs with size morethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high i ntensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing..								
	KPWD S.R 2018-19	It. No.		24.4.	Pg.No.	180.00			
		sqm	6	0.90	0.9		4.86		
						Total Qty	4.86	7557.80	36,730.91
								Total Constrution cost	1,67,51,961.41
								GST 12%	20,10,235.37
								Design Report,Proof Checking & PMC Amount	4,00,000.00
								Tender Primium 5%	8,37,598.07
								Sub Total	1,99,99,794.85
								Miscellaneous & Rounding Off	205.15
								Grand Total	2,00,00,000.00

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SRI SAI CONSULTANTS BANGALORE-90

Consultant
For Sri Sai Consultants

Assistant Engineer
Ward-03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Improvements to roads and drains at Industrial area, 5th phase and surroudings area in ward no:03 Yelahanka Satellite Town sub Division

JOB NUMBER.:						GO.No-1520	Est. Amount =	200.00	Lakhs
Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
1	Removing and resetting of footpath slab								
	KPWD S.R 2018-19	lt. No.	37.56		Pg.No.	270			
	Ch:00-110 5th Phase (Canara Bank Front Road)	sqm	2	99.00	1.20		237.60		
	Ch:110-340		2	207.00	1.20		496.80		
	Ch:00-110 New Indian Bakery Road		2	99.00	1.20		237.60		
	Ch:110-345		2	211.00	1.20		506.40		
	Ch:00-230 KSAIDL Industrial Road		2	207.00	1.00		414.00		
	Ch: 230-400		2	153.00	1.00		306.00		
	Ch:00-220 L Shape Connecting Road		2	198.00	1.00		396.00		
	Ch:00-230 Industrial Road		2	207.00	1.00		414.00		
	Ch: 230-370		2	126.00	1.00		252.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2	378.00	1.00		756.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2	252.00	1.00		504.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		1	198.00	1.20		237.60		
	Ch:00-220 Double Road (RHS)		1	198.00	1.20		237.60		
	Ch:00-220 Upto Bus Stop End		2	198.00	1.20		475.20		
						Total Qty	5470.80	208.82	11,42,412.46
2	Removing and resetting of kerb stones								
	KPWD S.R 2018-19	lt. No.	37.57.		Pg.No.	270			
	Ch:00-110 5th Phase (Canara Bank Front Road)	M	2	99.00			198.00		
	Ch:110-340		2	207.00			414.00		
	Ch:00-110 New Indian Bakery Road		2	99.00			198.00		
	Ch:110-345		2	211.00			422.00		
	Ch:00-230 KSAIDL Industrial Road		2	207.00			414.00		
	Ch: 230-400		2	153.00			306.00		
	Ch:00-220 L Shape Connecting Road		2	198.00			396.00		
	Ch:00-230 Industrial Road		2	207.00			414.00		
	Ch: 230-370		2	126.00			252.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2	378.00			756.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2	252.00			504.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		1	198.00			198.00		
	Ch:00-220 Double Road (RHS)		1	198.00			198.00		
	Ch:00-220 Upto Bus Stop End		2	198.00			396.00		
						Total Qty	5066.00	104.94	5,31,626.04
3	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specificationsand as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	lt. No.	19.10		Pg.No.	130			
	Desilting of Drain								
	Ch:00-110 5th Phase (Canara Bank Front Road)		2	110.00	0.50	0.60	66.00		
	Ch:110-340		2	230.00	0.50	0.60	138.00		
	Ch:00-110 New Indian Bakery Road		2	110.00	0.50	0.60	66.00		
	Ch:110-345		2	235.00	0.50	0.60	141.00		
	Ch:00-230 KSAIDL Industrial Road		2	230.00	0.50	0.60	138.00		
	Ch: 230-400		2	170.00	0.50	0.60	102.00		
	Ch:00-220 L Shape Connecting Road		2	220.00	0.50	0.60	132.00		
	Ch:00-140 1st Cross Road		2	140.00	0.50	0.60	84.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-140 2nd Cross Road		2		140.00	0.50	0.60	84.00		
	Ch:00-230 Industrial Road		2		230.00	0.50	0.60	138.00		
	Ch: 230-370		2		140.00	0.50	0.60	84.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		420.00	0.50	0.60	252.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2		280.00	0.50	0.60	168.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)									
	Ch:00-220 Double Road (LHS)		1		220.00	0.50	0.60	66.00		
	Ch:00-220 Double Road (RHS)		1		220.00	0.50	0.60	66.00		
	Ch:00-220 Upto Bus Stop End		2		220.00	0.50	0.60	132.00		
	New Culverts									
	Cross Roads	Cum	4		7.00	1.50	1.20	50.40		
	New Kerb									
	Ch:00-110 5th Phase (Canara Bank Front Road)		2		11.00	0.20	0.20	0.88		
	Ch:110-340		2		23.00	0.20	0.20	1.84		
	Ch:00-110 New Indian Bakery Road		2		11.00	0.20	0.20	0.88		
	Ch:110-345		2		24.00	0.20	0.20	1.92		
	Ch:00-230 KSAIDL Industrial Road		2		23.00	0.20	0.20	1.84		
	Ch: 230-400		2		17.00	0.20	0.20	1.36		
	Ch:00-220 L Shape Connecting Road		2		22.00	0.20	0.20	1.76		
	Ch:00-230 Industrial Road		2		23.00	0.20	0.20	1.84		
	Ch: 230-370		2		14.00	0.20	0.20	1.12		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		42.00	0.20	0.20	3.36		
	Ch:00-280 Nandhi Fashin Opp. Road		2		28.00	0.20	0.20	2.24		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)									
	Ch:00-220 Double Road (LHS)		1		22.00	0.20	0.20	0.88		
	Ch:00-220 Double Road (RHS)		1		22.00	0.20	0.20	0.88		
	Ch:00-220 Upto Bus Stop End		2		22.00	0.20	0.20	1.76		
	Block wall for Tree's Surrounding									
	5th phase and surroudings area		30	2	4.00	0.20	0.30	14.40		
							Total Qty	**1944.36**	**211.79**	**4,11,792.12**
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete Cum of Mix 1:3:6 with OPC @ 220kgs, with 40mm anddown size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1,4.2									
	KPWD S.R 2018-19	It. No.		4.2.		Pg.No.	13			
	New Culverts									
	Cross Roads		4		7.00	1.50	0.15	6.30		
	New Kerb									
	Ch:00-110 5th Phase (Canara Bank Front Road)		2		11.00	0.20	0.10	0.44		
	Ch:110-340		2		23.00	0.20	0.10	0.92		
	Ch:00-110 New Indian Bakery Road		2		11.00	0.20	0.10	0.44		
	Ch:110-345		2		24.00	0.20	0.10	0.96		
	Ch:00-230 KSAIDL Industrial Road		2		23.00	0.20	0.10	0.92		
	Ch: 230-400		2		17.00	0.20	0.10	0.68		
	Ch:00-220 L Shape Connecting Road		2		22.00	0.20	0.10	0.88		
	Ch:00-230 Industrial Road		2		23.00	0.20	0.10	0.92		
	Ch: 230-370		2		14.00	0.20	0.10	0.56		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		42.00	0.20	0.10	1.68		
	Ch:00-280 Nandhi Fashin Opp. Road		2		28.00	0.20	0.10	1.12		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)									
	Ch:00-220 Double Road (LHS)		1		22.00	0.20	0.10	0.44		
	Ch:00-220 Double Road (RHS)		1		22.00	0.20	0.10	0.44		
	Ch:00-220 Upto Bus Stop End		2		22.00	0.20	0.10	0.88		
	Block wall for Tree's Surrounding									
	5th phase and surroudings area		30	2	4.00	0.20	0.10	4.80		
							Total Qty	**22.38**	**5505.64**	**1,23,216.22**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate In Rs.	Amount In Rs.
5	Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.		28.8.2	Pg.No.	229			
	One cubic mt 90kg For Culvert	T	1			1.65	1.65		
						Total Qty	1.65	72326.98	1,19,339.52
6	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.								
	KPWD S.R 2018-19	It. No.		37.59.1.	Pg.No.	271			
	New Culverts								
	Bottom Slab	Cum	4	1	7.00	1.50	0.25	10.50		
	Side Walls		4	2	7.00	0.20	0.70	7.84		
							Total Qty	18.34	7070.20	1,29,667.47
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications.								
	KPWD S.R 2018-19	It. No.		34.11.	Pg.No.	255			
	Bed Concret								
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)	cum	1		75.00	0.50	0.15	5.63		
	Ch:00-220 Double Road (RHS)		1		75.00	0.50	0.15	5.63		
	Ch:00-220 Upto Bus Stop End		2		75.00	0.50	0.15	11.25		
							Total Qty	22.50	5599.98	1,25,999.55
8	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	Approved Data Rate								
	New Cover Slab for Damged Portion								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Sqm	2		11.00	1.20		26.40		
	Ch:110-340		2		23.00	1.20		55.20		
	Ch:00-110 New Indian Bakery Road		2		11.00	1.20		26.40		
	Ch.110-345		2		24.00	1.20		57.60		
	Ch:00-230 KSAIDL Industrial Road		2		23.00	1.00		46.00		
	Ch: 230-400		2		17.00	1.00		34.00		
	Ch:00-220 L Shape Connecting Road		2		22.00	1.00		44.00		
	Ch:00-230 Industrial Road		2		23.00	1.00		46.00		
	Ch: 230-370		2		14.00	1.00		28.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		42.00	1.00		84.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2		28.00	1.00		56.00		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)									
	Ch:00-220 Double Road (LHS)		1		22.00	1.20		26.40		
	Ch:00-220 Double Road (RHS)		1		22.00	1.20		26.40		
	Ch:00-220 Upto Bus Stop End		2		22.00	1.20		52.80		
							Total Qty	**609.20**	**2337.00**	**14,23,700.40**
9	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)									
	Approved Data Rate									
	Ch:00-220 Double Road (RHS)									
	Cross Roads	Sqm	4		7.00	1.50		42.00		
							Total Qty	**42.00**	**5418.00**	**2,27,556.00**
10	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete as per specifications and as per directions of Engineer in charge of work.									
	Approved Data Rate									
	New Kerb For Damaged Portion									
	Ch:00-110 5th Phase (Canara Bank Front Road)	Nos	2		24.00			48.00		
	Ch:110-340		2		51.00			102.00		
	Ch:00-110 New Indian Bakery Road		2		24.00			48.00		
	Ch:110-345		2		53.00			106.00		
	Ch:00-230 KSAIDL Industrial Road		2		51.00			102.00		
	Ch: 230-400		2		38.00			76.00		
	Ch:00-220 L Shape Connecting Road		2		49.00			98.00		
	Ch:00-230 Industrial Road		2		51.00			102.00		
	Ch: 230-370		2		31.00			62.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		93.00			186.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2		62.00			124.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)									
	Ch:00-220 Double Road (LHS)		1		49.00			49.00		
	Ch:00-220 Double Road (RHS)		1		49.00			49.00		
	Ch:00-220 Upto Bus Stop End		2		49.00			98.00		
							Total Qty	**1250.00**	**477.00**	**5,96,250.00**
11	KSRB 5-14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200mm having block density not less than 1800kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications.									
	KPWD S.R 2018-19	It. No.	5.27.1.		Pg.No. 27					
	Block wall for Tree's Surrounding									
	5th phase and surroudings area	Sqm	30	2	4.00		0.40	96.00		
							Total Qty	**96.00**	**984.96**	**94,556.16**
12	KSRB15-3.7 : Providing 18mm thick cement plaster in singlecoat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications									
	KPWD S.R 2018-19	It. No.	15.15.		Pg.No. 116					
	Block wall for Tree's Surrounding									
	5th phase and surroudings area	sqm	30	2	4.00		0.80	192.00		
							Total Qty	**192.00**	**298.08**	**57,231.36**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
13	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	24.1.	Pg.No.	180				
	New Kerb								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Sqm	2		110.00	0.50	110.00		
	Ch:110-340		2		230.00	0.50	230.00		
	Ch:00-110 New Indian Bakery Road		2		110.00	0.50	110.00		
	Ch:110-345		2		235.00	0.50	235.00		
	Ch:00-230 KSAIDL Industrial Road		2		230.00	0.50	230.00		
	Ch: 230-400		2		170.00	0.50	170.00		
	Ch:00-220 L Shape Connecting Road		2		230.00	0.50	230.00		
	Ch:00-230 Industrial Road		2		230.00	0.50	230.00		
	Ch: 230-370		2		140.00	0.50	140.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		420.00	0.50	420.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2		280.00	0.50	280.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		2		220.00	0.50	220.00		
	Ch:00-220 Double Road (RHS)		2		220.00	0.50	220.00		
	Ch:00-220 Upto Bus Stop End		2		220.00	0.50	220.00		
	Block wall for Tree's Surrounding								
	5th phase and surroudings area		30	2	4.00	0.80	192.00		
						Total Qty	3237.00	84.80	2,74,497.60
14	Providing and laying heavy duty cobble stones interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	14.6	Pg.No.	103				
	Cobble Stone Damaged Portion								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Sqm	2		11.00	0.50	11.00		
	Ch:110-340		2		23.00	0.50	23.00		
	Ch:00-110 New Indian Bakery Road		2		11.00	0.50	11.00		
	Ch:110-345		2		24.00	0.50	24.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		2		42.00	0.50	42.00		
	Ch:00-280 Nandhi Fashin Opp. Road		2		28.00	0.50	28.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		1		22.00	0.50	11.00		
	Ch:00-220 Double Road (RHS)		1		22.00	0.50	11.00		
	Ch:00-220 Upto Bus Stop End		2		22.00	0.50	22.00		
						Total Qty	183.00	1116.18	2,04,260.94

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
15	Providing ruled pointing to Coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, HOM curing complete as per specifications.								
	KPWD S.R 2018-19	It. No.	34.13.2.	Pg.No.	256				
	SSM Drain (For Damaged Portion)								
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)	sqm	1	22.00		0.60	13.20		
	Ch:00-220 Double Road (RHS)		1	22.00		0.60	13.20		
	Ch:00-220 Upto Bus Stop End		2	22.00		0.60	26.40		
						Total Qty	**52.80**	**150.52**	**7,947.46**
16	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	19.14	Pg.No.	143				
	Earth for Road								
	Road Across Cuttings	Cum	30	7.00	0.30	0.35	22.05		
			32	8.50	0.30	0.35	28.56		
	Pot Holes		43	1.20	1.00	0.35	18.06		
						Total Qty	**68.67**	**57.03**	**3,916.11**
17	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.6	Pg.No.	153				
	GSB For Road								
	Road Across Cuttings	Cum.	30	7.00	0.30	0.15	9.45		
			32	8.50	0.30	0.15	12.24		
	Pot Holes		43	1.20	1.00	0.15	7.74		
						Total Qty	**29.43**	**1855.00**	**54,592.65**
18	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	20.18	Pg.No.	155				
	Wet Mix								
	Road Across Cuttings	Cum	30	7.00	0.30	0.20	12.60		
			32	8.50	0.30	0.20	16.32		
	Pot Holes		43	1.20	1.00	0.20	10.32		
						Total Qty	**39.24**	**2001.28**	**78,530.23**
19	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	KPWD S.R 2018-19	It. No.	19.64		Pg.No.	147			
	Compaction								
	Road Across Cuttings	Sqm	30	7.00	0.30		63.00		
			32	8.50	0.30		81.60		
	Pot Holes		43	1.20	1.00		51.60		
						Total Qty	**196.20**	**6.36**	**1,247.83**
20	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.6		Pg.No.	158			
	Primer Coat								
	Road Across Cuttings	Sqm	30	7.00	0.30		63.00		
			32	8.50	0.30		81.60		
	Pot Holes		43	1.20	1.00		51.60		
						Total Qty	**196.20**	**33.92**	**6,655.10**
21	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.20		Pg.No.	158			
	Cleaning								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Sqm	1	110.00	7.50		825.00		
	Ch:110-340		1	230.00	7.50		1725.00		
	Ch:00-110 New Indian Bakery Road		1	110.00	6.50		715.00		
	Ch:110-345		1	235.00	6.50		1527.50		
	Ch:00-230 KSAIDL Industrial Road		1	230.00	6.30		1449.00		
	Ch: 230-400		1	170.00	6.30		1071.00		
	Ch:00-220 L Shape Connecting Road		1	220.00	6.30		1386.00		
	Ch:00-140 1st Cross Road		1	140.00	4.50		630.00		
	Ch:00-140 2nd Cross Road		1	140.00	4.50		630.00		
	Ch:00-230 Industrial Road		1	230.00	6.50		1495.00		
	Ch: 230-370		1	140.00	6.50		910.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		1	420.00	12.00		5040.00		
	Ch:00-280 Nandhi Fashin Opp. Road		1	280.00	8.00		2240.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)		1						
	Ch:00-220 Double Road (LHS)		1	220.00	6.50		1430.00		
	Ch:00-220 Double Road (RHS)		1	220.00	6.50		1430.00		
	Ch:00-220 Upto Bus Stop End		1	220.00	7.50		1650.00		
						Total Qty	**24153.50**	**5.30**	**1,28,013.55**
22	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch mix plant with sensor paver Gr-I I Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision								
	KPWD S.R 2018-19	It. No.	21.17.2		Pg.No.	160			
	DBM								
	Road Across Cuttings	cum	30	7.00	0.30	0.05	3.15		
			32	8.50	0.30	0.05	4.08		
	Pot Holes		43	1.20	1.00	0.05	2.58		
	BM For Profile correction								
	Tack Coat Qty X 15 %		1	24160.10		0.05	181.20		
						Total Qty	**191.01**	**7620.34**	**14,55,561.14**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
23	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications and as per directoins of the engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	21.7.		Pg.No.	158			
	Tack Coat For Road								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Sqm	1		110.00	7.50	825.00		
	Ch:110-340		1		230.00	7.50	1725.00		
	Ch:00-110 New Indian Bakery Road		1		110.00	6.50	715.00		
	Ch:110-345		1		235.00	6.50	1527.50		
	Ch:00-230 KSAIDL Industrial Road		1		230.00	6.30	1449.00		
	Ch: 230-400		1		170.00	6.30	1071.00		
	Ch:00-220 L Shape Connecting Road		1		220.00	6.30	1386.00		
	Ch:00-140 1st Cross Road		1		140.00	4.50	630.00		
	Ch:00-140 2nd Cross Road		1		140.00	4.50	630.00		
	Ch:00-230 Industrial Road		1		230.00	6.50	1495.00		
	Ch. 230-370		1		140.00	6.50	910.00		
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		1		420.00	12.00	5040.00		
	Ch:00-280 Nandhi Fashin Opp. Road		1		280.00	8.00	2240.00		
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		1		220.00	6.50	1430.00		
	Ch:00-220 Double Road (RHS)		1		220.00	6.50	1430.00		
	Ch:00-220 Upto Bus Stop End		1		220.00	7.53	1656.60		
						Total Qty	24160.10	12.72	3,07,316.47
24	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.								
	KPWD S.R 2018-19	It. No.	21.78.12.		Pg.No.	171			
	BC Overlay								
	Ch:00-110 5th Phase (Canara Bank Front Road)	Cum	1		110.00	7.50	0.04	33.00	
	Ch:110-340		1		230.00	7.50	0.04	69.00	
	Ch:00-110 New Indian Bakery Road		1		110.00	6.50	0.04	28.60	
	Ch:110-345		1		235.00	6.50	0.04	61.10	
	Ch:00-230 KSAIDL Industrial Road		1		230.00	6.30	0.04	57.96	
	Ch: 230-400		1		170.00	6.30	0.04	42.84	
	Ch:00-220 L Shape Connecting Road		1		220.00	6.30	0.04	55.44	
	Ch:00-140 1st Cross Road		1		140.00	4.50	0.04	25.20	
	Ch:00-140 2nd Cross Road		1		140.00	4.50	0.04	25.20	
	Ch:00-230 Industrial Road		1		230.00	6.50	0.04	59.80	
	Ch: 230-370		1		140.00	6.50	0.04	36.40	
	Ch:00-420 Industrial Main Road (Kriushna Enterprise's Front Road)		1		420.00	12.00	0.04	201.60	
	Ch:00-280 Nandhi Fashin Opp. Road		1		280.00	8.00	0.04	89.60	
	Shanthi niketh Apartments Front (L Shape) Double Road (LHS)								
	Ch:00-220 Double Road (LHS)		1		220.00	6.50	0.04	57.20	
	Ch:00-220 Double Road (RHS)		1		220.00	6.50	0.04	57.20	
	Ch:00-220 Upto Bus Stop End		1		220.00	7.50	0.04	66.00	
						Total Qty	966.14	8699.42	84,04,857.64

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate In Rs.	Amount In Rs.
25	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.	48.3	Pg.No.	182				
	Edge lane								
	Road Both Side	Sqm	1	2	3315.00	0.15	994.50		
	Road Centre		1	1	1657.50	0.10	165.75		
						Total Qty	1160.25	454.74	5,27,612.09
26	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.								
	KPWD S.R 2018-19	It. No.	24.41.	Pg.No.	187				
	Pavement Markers								
	Road Both Side	Nos	1	2	220.00		440.00		
	Road Center		1	1	73.33		73.33		
						Total Qty	513.33	357.22	1,83,371.74
27	Dismantling the damaged or collapsed manholes of 1.2M dia., coNickel in shape, and reconstructing the same for the same dimensions, with machine made wire cut brick in CM 1:4 with ordinary portland cement etc. as per design and specifications. The existing ring, cover and CC beeding to be used. For manholes of 1.2M dia and 1.0 M depth								
	KPWD S.R 2018-19	It. No.	118.1 (T440A)	Pg.No.	180.00				
	1.0m Depth Rate	Nos			8		8		
	0.10m Depth Rate							12694.00	
	0.30m Depth Rate							1269.40	
						Total Qty	8.00	3808.20	30,465.60
	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete, as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender.								
		It. No.	24.59.	Pg.No.	190.00				
	Name Board	sqm	3		1.60		0.90 4.32		
						Total Qty	4.32	14094.82	60,889.62

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
29	Direction and Place Identification Signs with size morethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high i ntensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.								
	KPWD S.R 2018-19	It. No.		24.4.	Pg.No.	180.00			
		sqm	6	0.90	0.9		4.86		
						Total Qty	4.86	7557.80	36,730.91
								Total Constrution cost	1,67,49,813.98
								GST 12%	20,09,977.68
								Design Report,Proof Checking & PMC Amount	4,00,000.00
								Tender Premium 5%	8,37,490.70
								Sub Total	1,99,97,282.36
								Miscellaneous & Rounding Off	2,717.64
								Grand Total	2,00,00,000.00

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SRI SAI CONSULTANTS BANGALORE-90

Consultant
For Sri Sai Consultants

ssistant Engineer
Ward-03
BMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work:Improvements to roads and drains at balance main and cross roads of Santhosh Nagara, Escorts Engineering layouts and surrounding areas in ward no:03 Yelahanka Satellite Town sub Division

JOB NUMBER.:							Go No-1521	Est. Amount =	200.00	Lakhs
Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity		Rate in Rs.	Amount in Rs.
1	Removing and resetting of footpath slab									
	KPWD S.R 2018-19	It. No.		21.7.	Pg.No.	158				
	RRS Cover Slab	Sqm								
	Santhosh Nagara									
	Ch:00-355 6th Cross Road		2	177.00	0.90		318.60			
	SFS 407 and surrounding areas Roads									
	Ch:00-450 1st Cross 2nd Main Road		2	405.00	1.20		972.00			
	Ch:450-750 1st Cross 2nd Main Road		2	270.00	1.20		648.00			
						Total Qty	1938.60		208.82	4,04,818.45
2	Removing and resetting of kerb stones									
	KPWD S.R 2018-19	It. No.		37.57.	Pg.No.	270				
	SFS 407 and surrounding areas Roads	m								
	Ch:00-450 1st Cross 2nd Main Road		2	405.00			810.00			
	Ch:450-750 1st Cross 2nd Main Road		2	270.00			540.00			
						Total Qty	1350.00		104.94	1,41,669.00
3	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.									
	KPWD S.R 2018-19	It. No.		19.10	Pg.No.	130				
	Desilting of Drain									
	SFS 407 and surrounding areas Roads									
	Ch:00-450 1st Cross 2nd Main Road		2	405.00	0.60	0.50	243.00			
	Ch:450-750 1st Cross 2nd Main Road		2	270.00	0.60	0.50	162.00			
	CC Drain									
	Escorts Engineering layouts									
	Ch:00-320 5th Escorts Main Road		2	320.00	1.00	0.90	576.00			
	Ch:00-205 4th Cross Road		1	205.00	1.00	0.90	184.50			
	Santhosh Nagara									
	Ch:00-355 6th Cross Road		2	355.00	1.00	0.90	639.00			
	New Kerb									
	Ch:00-320 5th Escorts Main Road		2	320.00	0.20	0.20	25.60			
	Ch:00-355 6th Cross Road		2	355.00	0.20	0.20	28.40			
	SFS 407 and surrounding areas Roads									
	Ch:00-450 1st Cross 2nd Main Road		2	45.00	0.20	0.20	3.60			
	Ch:450-750 1st Cross 2nd Main Road		2	30.00	0.20	0.20	2.40			
	New Culvert									
	Cross Road	Cum	5	7.30	1.50	1.10	60.23			
						Total Qty	1924.73		211.79	4,07,634.72

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete Cum of Mix 1:3:6 with OPC @ 220kgs, with 40mm anddown size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1,4.2								
	KPWD S.R 2018-19	It. No.	4.2.	Pg.No.	13				
	CC Drain	cum							
	Escorts Engineering layouts								
	Ch:00-320 5th Escorts Main Road		2	320.00	1.00	0.15	96.00		
	Ch:00-205 4th Cross Road		1	205.00	1.00	0.15	30.75		
	Santhosh Nagara								
	Ch:00-355 6th Cross Road		2	355.00	1.00	0.15	106.50		
	New Kerb								
	Ch:00-320 5th Escorts Main Road		2	320.00	0.20	0.10	12.80		
	Ch:00-355 6th Cross Road		2	355.00	0.20	0.10	14.20		
	SFS 407 and surrounding areas Roads								
	Ch:00-450 1st Cross 2nd Main Road		2	45.00	0.20	0.10	1.80		
	Ch:450-750 1st Cross 2nd Main Road		2	30.00	0.20	0.10	1.20		
	New Culvert								
	Cross Road		5	7.30	1.50	0.15	8.21		
						Total Qty	271.46	5505.64	14,94,561.03
5	KSRRB M2200-6. Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.								
	KPWD S.R 2018-19	It. No.	28.8.2	Pg.No.	229				
	One cubic mt 60kg For CC Drain	T	1	32.19			32.19		
	One cubic mt 90kg For Culvert		1	1.71			1.71		
						Total Qty	33.90	72326.98	24,51,884.62
6	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.								
	KPWD S.R 2018-19	It. No.	37.59.1.	Pg.No.	271				
	CC Drain	Cum							
	Bottom Raft								
	Ch:00-320 5th Escorts Main Road		2 1	320.00	0.90	0.15	86.40		
	Ch:00-205 4th Cross Road		1 1	205.00	0.90	0.15	27.68		
	Santhosh Nagara								
	Ch:00-355 6th Cross Road		2 1	355.00	0.90	0.15	95.85		
	Side Wall								
	Ch:00-320 5th Escorts Main Road		2 2	320.00	0.15	0.70	134.40		
	Ch:00-205 4th Cross Road		1 2	205.00	0.15	0.70	43.05		
	Santhosh Nagara								
	Ch:00-355 6th Cross Road		2 2	355.00	0.15	0.70	149.10		
	New Culvert								
	Bottom Raft		5 1	7.30	1.20	0.20	8.76		
	Side Wall		5 2	7.30	0.20	0.70	10.22		
						Total Qty	555.46	7070.20	39,27,213.29

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
7	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)								
	Approval Rate								
	Cover Slab	Sqm							
	Escorts Engineering layouts								
	Ch:00-320 5th Escorts Main Road		2	320.00	0.90		576.00		
	Ch:00-205 4th Cross Road		1	205.00	0.90		184.50		
	Santhosh Nagara								
	Ch:00-355 6th Cross Road (Refixing Slab 175)		2	181.00	0.90		325.80		
	Damaged Cover Slab								
	SFS 407 and surrounding areas Roads								
	Ch:00-450 1st Cross 2nd Main Road		2	45.00	1.20		108.00		
	Ch:450-750 1st Cross 2nd Main Road		2	30.00	1.20		72.00		
						Total Qty	1266.30	2337.00	29,59,343.10
8	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed)								
	Approval Rate								
	New Culvert	Sqm							
	Cross Road		5	7.30	1.50		54.75		
						Total Qty	54.75	5418.00	2,96,635.50
9	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete.								
	KPWD S.R 2018-19 It. No. 5.29.1. Pg.No. 27								
	New Kerb	Nos							
	Ch:00-320 5th Escorts Main Road		2	712			1424		
	Ch:00-355 6th Cross Road		2	789			1578		
	SFS 407 and surrounding areas Roads								
	Ch:00-450 1st Cross 2nd Main Road		2	100			200		
	Ch:450-750 1st Cross 2nd Main Road		2	67			134		
						Total Qty	3336	477.00	15,91,272.00
10	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.								
	KPWD S.R 2018-19 It. No. 24.1. Pg.No. 180								
	New Kerb	Sqm							
	Ch:00-320 5th Escorts Main Road		2	320.00		0.50	320.00		
	Ch:00-355 6th Cross Road		2	355.00		0.50	355.00		
	SFS 407 and surrounding areas Roads								
	Ch:00-450 1st Cross 2nd Main Road		2	450.00		0.50	450.00		
	Ch:450-750 1st Cross 2nd Main Road		2	300.00		0.50	300.00		
						Total Qty	1425.00	84.80	1,20,840.00
11	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19 It. No. 19.14 Pg.No. 143								
	Earth for Road	Cum							
	Road Across Cuttings		20	8.00	0.30	0.35	16.80		
	Pot Holes		20	1.00	0.80	0.35	5.60		
						Total Qty	22.40	57.03	1,277.43
12	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19 It. No. 20.6 Pg.No. 153								

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate In Rs.	Amount in Rs.
	GSB For Road									
	Road Across Cuttings	Cum.	20		8.00	0.30	0.15	7.20		
	Pot Holes		20		1.00	0.80	0.15	2.40		
							Total Qty	**9.60**	**1855.00**	**17,808.00**
13	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and as per directoins of the engineer in charge of work.									
	KPWD S.R 2018-19 lt. No. 20.18 Pg.No. 155									
	Wet Mix									
	Road Across Cuttings	Cum	20		8.00	0.30	0.20	9.60		
	Pot Holes		20		1.00	0.80	0.20	3.20		
							Total Qty	**12.80**	**2001.28**	**25,616.38**
14	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19 lt. No. 19.64 Pg.No. 147									
	Compaction									
	Road Across Cuttings	Sqm	20		8.00	0.30		48.00		
	Pot Holes		20		1.00	0.80		16.00		
							Total Qty	**64.00**	**6.36**	**407.04**
15	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19 lt. No. 21.6 Pg.No. 158									
	Primer Coat									
	Road Across Cuttings	Sqm	20		8.00	0.30		48.00		
	Pot Holes		20		1.00	0.80		16.00		
							Total Qty	**64.00**	**33.92**	**2,170.88**
16	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.									
	KPWD S.R 2018-19 lt. No. 21.20 Pg.No. 158									
	Cleaning									
	Ch:00-450 1st Cross 2nd Main Road	Sqm	1		450.00	8.00		3600.00		
	Ch:450-750 1st Cross 2nd Main Road		1		300.00	6.50		1950.00		
							Total Qty	**5550.00**	**5.30**	**29,415.00**
17	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch mix plant with sensor paver Gr-I I Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision									
	KPWD S.R 2018-19 lt. No. 21.17.2 Pg.No. 160									
	DBM									
	Road Across Cuttings	Cum	20		8.00	0.30	0.05	2.40		
	Pot Holes		20		1.00	0.80	0.05	0.80		
	Profile Correction 15%		1		5550.00	0.15	0.05	41.63		
							Total Qty	**44.83**	**7620.34**	**3,41,619.84**
18	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications and as per directoins of the engineer in charge of work.									
	KPWD S.R 2018-19 lt. No. 21.7. Pg.No. 158									
	BC Overlay									
	Ch:00-450 1st Cross 2nd Main Road	Sqm	1		450.00	8.00		3600.00		
	Ch:450-750 1st Cross 2nd Main Road		1		300.00	6.50		1950.00		
							Total Qty	**5550.00**	**12.72**	**70,596.00**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
19	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.								
	KPWD S.R 2018-19	It. No.		21.78.12	Pg.No.	171			
	BC Overlay								
	Ch:00-450 1st Cross 2nd Main Road	Cum	1	450.00	8.00	0.04	144.00		
	Ch:450-750 1st Cross 2nd Main Road		1	300.00	6.50	0.04	78.00		
						Total Qty	**222.00**	**8699.42**	**19,31,271.24**
20	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19	It. No.		24.15	Pg.No.	182			
	BC Overlay								
	SFS 407 and surrounding areas Roads	Sqm							
	Ch:00-450 1st Cross 2nd Main Road		2	750.00	0.15		225.00		
	Ch:450-750 1st Cross 2nd Main Road		1	375.00	0.10		37.50		
						Total Qty	**262.50**	**454.74**	**1,19,369.25**
21	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.								
	KPWD S.R 2018-19	It. No.		24.41.	Pg.No.	187			
	Edge lane								
	Road Both Side	Nos	1	2	375.00		750.00		
	Road Centre		1	1	187.50		187.50		
						Total Qty	**937.50**	**357.22**	**3,34,893.75**
22	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS angle of 15mm x 20mm x 1.2mm, supported by 38mm OD stainless steel pipe all round in 304 grade and 2 nos of vertical posts of 50 mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in color with letters and border in white, the item includes earthwork excavation, cost of all materials, loading, unloading, lead, lift, transportation etc., complete, as per direction of engineer incharge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory conforming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender.								
	KPWD S.R 2018-19	It. No.		24.59.	Pg.No.	190			
	Edge lane								
	Road Both Side	sqm	2	1.60	0.90		2.88		
	Road Centre								
						Total Qty	**2.88**	**14094.82**	**40,593.08**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
23	Direction and Place Identification Signs with size morethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high i ntensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.								
	KPWD S.R 2018-19	It. No.	24.4.		Pg.No.	180			
	Cross Roads								
		sqm	6	0.90	0.90		4.86		
						Total Qty	4.86	7557.80	36,730.91
								Total Constrution cost	1,67,47,640.51
								GST 12%	20,09,716.86
								Design Report,Proof Checking & PMC Amount	4,00,000.00
								Tender Premium 5%	8,37,382.03
								Sub Total	1,99,94,739.40
								Miscellaneous & Rounding Off	5,260.60
								Grand Total	2,00,00,000.00

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SRK SAI CONSULTANTS

Consultant
For SRK SAI Consultants

Assistant Engineer
Ward no. 03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Improvements to roads and drains at Akshaya Nagara, Muneshwara layout and surrounding area in ward No :03 Yelahanka Satellite Town sub Division

JOB NUMBER.:								Go No-1522	Est. Amount =	200.00	Lakhs
Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.		
1	Removing and resetting of footpath slab										
	Ch:00-268 5th Cross Road	Sqm	2	30.0	0.90		54.00				
	SFS 407 and surrounding areas Roads										
	Ch:00-360 2nd Main Road		2	324.00	1.20		777.60				
						Total Qty	**831.60**	**208.82**	**1,73,654.71**		
2	Removing and resetting of kerb stones										
	SFS 407 and surrounding areas Roads	M									
	Ch:00-360 2nd Main Road		2	324.00			648.00				
						Total Qty	**648.00**	**104.94**	**68,001.12**		
3	KSRRB300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. KPWD S R 2018-19 It. No. 19.10 Pg.No. 130										
	Desilting of Drain										
	Ch:00-340 Balaji super bazar R/s Road		1	340.00	0.60	0.50	102.00				
	CC Drain										
	Akshaya Nagara										
	Ch:00-268 5th Cross Road		2	268.00	1.00	0.90	482.40				
	Ch:00-280 8th Cross road connecting to Rajakaluve		2	280.00	1.00	0.90	504.00				
	Ch:00-340 Balaji super bazar R/s Road		1	340.00	1.00	0.90	306.00				
	New Kerb										
	Ch:00-268 5th Cross Road	Cum	2	268.00	0.20	0.20	21.44				
	Ch:00-340 Balaji super bazar R/s Road		2	340.00	0.20	0.20	27.20				
	SFS 407 and surrounding areas Roads										
	Ch:00-360 2nd Main Road		2	36.00	0.20	0.20	2.88				
	New Culvert										
	Cross Road		7	6.50	1.50	1.20	81.90				
						Total Qty	**1527.82**	**211.79**	**3,23,573.94**		
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete Cum of Mix 1:3:6 with OPC @ 220kgs, with 40mm anddown size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1,4.2 KPWD S.R 2018-19 It. No. 4.2. Pg.No. 13										
	CC Drain										
	Akshaya Nagara										
	Ch:00-268 5th Cross Road		2	268.00	1.00	0.15	80.40				
	Ch:00-280 8th Cross road connecting to Rajakaluve		2	280.00	1.00	0.15	84.00				

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-340 Balaji super bazar R/s Road	Cum	1		340.00	1.00	0.15	51.00		
	New Kerb									
	Ch:00-268 5th Cross Road		2		268.00	0.20	0.10	10.72		
	Ch:00-340 Balaji super bazar R/s Road		2		340.00	0.20	0.10	13.60		
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road		2		36.00	0.20	0.10	1.44		
	New Culvert									
	Cross Road		7		6.50	1.50	0.15	10.24		
							Total Qty	251.40	5505.64	13,84,117.90
5	KSRRB M2200-6. Providing TMT Bars Fe 500 steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.									
	KPWD S.R 2018-19	It. No. 28.8.2 Pg.No. 229								
	One cubic mt 60kg For CC Drain	T		1	31.02			31.02		
	One cubic mt 90kg For Culvert			1	1.80			1.80		
							Total Qty	32.82	72326.98	23,73,771.48
6	Providing and laying plain/reinforced cement concrete for side drains Wall & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500,1700, 2200. including cost of materials, labour, HOM complete as per specifications.									
	KPWD S.R 2018-19	It. No. 37.59.1. Pg.No 271								
	CC Drain	Cum								
	Bottom Raft									
	Ch:00-268 5th Cross Road		2	1	268.00	1.00	0.15	80.40		
	Ch:00-280 8th Cross road connecting to Rajakaluve		2	1	280.00	1.00	0.15	84.00		
	Ch:00-340 Balaji super bazar R/s Road		1	1	340.00	1.00	0.15	51.00		
	Side Wall									
	Ch:00-268 5th Cross Road		2	2	268.00	0.15	0.70	112.56		
	Ch:00-280 8th Cross road connecting to Rajakaluve		2	2	280.00	0.15	0.70	117.60		
	Ch:00-340 Balaji super bazar R/s Road		1	2	340.00	0.15	0.70	71.40		
	New Culvert									
	Bottom Raft		7		6.50	1.50	0.20	13.65		
	Side Wall		7		6.50	0.20	0.70	6.37		
							Total Qty	536.98	7070.20	37,96,556.00
7	Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm C/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of cost of all materials(data Rate enclosed)									
	Approval Rate									
	Cover Slab									
	Akshaya Nagara									

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-268 5th Cross Road (Refixing Slab 238)	Sqm	2		238.00	0.90		428.40		
	Ch:00-280 8th Cross road connecting to Rajakaluve		2		280.00	0.90		504.00		
	Ch:00-340 Balaji super bazar R/s Road		1		339.00	0.90		305.10		
	Damaged Cover Slab									
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road		2		36.00	1.20		86.40		
	Ch:00-450 1st Cross 2nd Main Road		2		45.00	1.20		108.00		
	Ch:450-750 1st Cross 2nd Main Road		2		30.00	1.20		72.00		
							Total Qty	1503.90	2337.00	35,14,614.30
8	Providing and laying Pre Cast Drain Cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both side etc. complete and as per drawing and direction of Engineer-in-charge of work (data Rate enclosed) Approval Rate									
	New Culvert	Sqm								
	Cross Road		7		6.50	1.50		68.25		
	Cross Road only covering slab 250mm		1		5.50	1.50		8.25		
							Total Qty	76.50	5418.00	4,14,477.00
9	Providing and fixing Pre cast solid concrete kerb stones of size 450 x 200 x 400 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete. KPWD S.R 2018-19 It. No. 5.29.1. Pg.No. 27									
	New Kerb	Nos								
	Ch:00-268 5th Cross Road		2		596			1192		
	Ch:00-340 Balaji super bazar R/s Road		2		756			1512		
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road		2		80			160		
							Total Qty	2864	477.00	13,66,128.00
10	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. KPWD S.R 2018-19 It. No. 24.1. Pg.No. 180									
	New Kerb	Sqm								
	Ch:00-268 5th Cross Road		2		268.00		0.50	268.00		
	Ch:00-340 Balaji super bazar R/s Road		2		340.00		0.50	340.00		
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road		2		360.00		0.50	360		
							Total Qty	968.00	84.80	82,086.40
11	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. KPWD S.R 2018-19 It. No. 19.14 Pg.No. 143									
	Earth Work									
	BC Road									
	Akshaya Nagara									
	Ch:00-30 connecting L/s Road		1		30.00	5.50	0.35	57.75		

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.35	38.50		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.35	38.50		
	Muneshwara layout	Cum								
	Ch:00-45 10th Cross Road		1		45.00	5.60	0.35	88.20		
	Ch:00-45 11th Cross Road		1		45.00	5.20	0.35	81.90		
	Ch:00-60 12th Cross Road		1		60.00	5.30	0.35	111.30		
	Road Across Cutting		50		7.50	0.30	0.35	39.38		
	Pot holes		38		1.00	1.20	0.35	15.96		
							Total Qty	**471.49**	**57.03**	**26,888.13**
12	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregatesof granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.									
	KPWD S.R 2018-19	It. No.	20.60		Pg.No.	153				
	Akshaya Nagara									
	Ch:00-30 connecting L/s Road		1		30.00	5.50	0.15	24.75		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.15	16.50		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.15	16.50		
	Muneshwara layout									
	Ch:00-45 10th Cross Road	Cum.	1		45.00	5.60	0.15	37.80		
	Ch:00-45 11th Cross Road		1		45.00	5.20	0.15	35.10		
	Ch:00-60 12th Cross Road		1		60.00	5.30	0.15	47.70		
	Road Across Cutting		50		7.50	0.30	0.15	16.88		
	Pot holes		38		1.00	1.20	0.15	6.84		
							Total Qty	**202.07**	**1855.00**	**3,74,839.85**
13	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.									
	KPWD S.R 2018-19	It. No.	20.18		Pg.No.	155				
	Akshaya Nagara									
	Ch:00-30 connecting L/s Road		1		30.00	5.50	0.20	33.00		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.20	22.00		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.20	22.00		
	Muneshwara layout									
	Ch:00-45 10th Cross Road	Cum	1		45.00	5.60	0.20	50.40		
	Ch:00-45 11th Cross Road		1		45.00	5.20	0.20	46.80		
	Ch:00-60 12th Cross Road		1		60.00	5.30	0.20	63.60		
	Road Across Cutting		50		7.50	0.30	0.20	22.50		
	Pot holes		38		1.00	1.20	0.20	9.12		
							Total Qty	**269.42**	**2001.28**	**5,39,184.86**
14	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.									
	KPWD S.R 2018-19	It. No.	19.64		Pg.No.	147				
	Akshaya Nagara									
	Ch:00-30 connecting L/s Road		1		30.00	5.50		165.00		
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00		
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00		
	Muneshwara layout									
	Ch:00-45 10th Cross Road	Sqm	1		45.00	5.60		252.00		
	Ch:00-45 11th Cross Road		1		45.00	5.20		234.00		
	Ch:00-60 12th Cross Road		1		60.00	5.30		318.00		
	Road Across Cutting		50		7.50	0.30		112.50		
	Pot holes		38		1.00	1.20		45.52		
							Total Qty	**1347.02**	**6.36**	**8,567.05**

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.								
	KPWD S.R 2018-19 It. No. 21.6 Pg.No. 158								
	Akshaya Nagara	Sqm							
	Ch:00-30 connecting L/s Road		1		30.00	5.50		165.00	
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00	
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00	
	Muneshwara layout								
	Ch:00-45 10th Cross Road		1		45.00	5.60		252.00	
	Ch:00-45 11th Cross Road		1		45.00	5.20		234.00	
	Ch:00-60 12th Cross Road		1		60.00	5.40		324.00	
	Road Across Cutting		50		7.50	0.31		116.25	
	Pot holes		38		1.00	1.12		42.48	
							Total Qty	**1353.73**	**33.92**	**45,918.52**
16	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications and as per directoins of the Engineer in charge of work.								
	KPWD S.R 2018-19 It. No. 21.2 Pg.No. 158								
	Ch:00-360 2nd Main Road	Sqm	1		360.00	6.87		2473.20	
							Total Qty	**2473.20**	**5.30**	**13,107.96**
17	KSRRB M500-17. Providing and laying dense graded bituminous macadam do-using 120 TPH capacity Asphalt batch mix plant with sensor paver Gr-I I Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision								
	KPWD S.R 2018-19 It. No. 21.17.2 Pg.No. 160								
	Akshaya Nagara	Cum							
	Ch:00-30 connecting L/s Road		1		30.00	5.50	0.05	8.25	
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.05	5.50	
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.05	5.50	
	Muneshwara layout								
	Ch:00-45 10th Cross Road		1		45.00	5.60	0.05	12.60	
	Ch:00-45 11th Cross Road		1		45.00	5.20	0.05	11.70	
	Ch:00-60 12th Cross Road		1		60.00	5.30	0.05	15.90	
	Road Across Cutting		50		7.50	0.30	0.05	5.63	
	Pot holes		38		1.00	1.20	0.05	2.28	
	Profile Corection 15%								
			1		2520.00		0.05	18.90	
							Total Qty	**86.25**	**7620.34**	**6,57,254.33**
18	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications.								
	KPWD S.R 2018-19 It. No. 21.7. Pg.No. 158								
	BC Road								
	Akshaya Nagara	Sqm							
	Ch:00-30 connecting L/s Road		1		30.00	5.50		165.00	
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00	
	Ch:00-20 connecting R/s Road		1		20.00	5.50		110.00	
	Muneshwara layout								
	Ch:00-45 10th Cross Road		1		45.00	5.60		252.00	
	Ch:00-45 11th Cross Road		1		45.00	5.20		234.00	
	Ch:00-60 12th Cross Road		1		60.00	5.20		312.00	

Sl. No	Description of Work	Unit	No		Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road									
			1		360.00	7.00		2520.00		
							Total Qty	3703.00	12.72	47,102.16
19	Providing and laying bituminous concrete 40mm thick with hot mix plant, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.									
	KPWD S.R 2018-19	It. No.	21.78.12.		Pg.No.	162				
	BC Road									
	Akshaya Nagara									
	Ch:00-30 connecting L/s Road		1		30.00	5.50	0.04	6.60		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.04	4.40		
	Ch:00-20 connecting R/s Road		1		20.00	5.50	0.04	4.40		
	Muneshwara layout									
	Ch:00-45 10th Cross Road	Cum	1		45.00	5.60	0.04	10.08		
	Ch:00-45 11th Cross Road		1		45.00	5.20	0.04	9.36		
	Ch:00-60 12th Cross Road		1		60.00	5.20	0.04	12.48		
	SFS 407 and surrounding areas Roads									
	Ch:00-360 2nd Main Road		1		360.00	7.00	0.04	100.80		
							Total Qty	148.12	8699.42	12,88,558.09
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.									
	KPWD S.R 2018-19	It. No.	24.15		Pg.No.	182				
	Edge lane									
	Road Both Side	Sqm	1	2	580.00	0.15		174.00		
	Road Centor		1		290.00	0.10		29.00		
							Total Qty	203.00	454.74	92,312.22
21	KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.									
	KPWD S.R 2018-19	It. No.	24.41.		Pg.No.	187				
	Edge lane									
	Road Both Side	Nos	1	2	120.00			240.00		
	Road Centor		1		120.00			120.00		
							Total Qty	360.00	357.22	1,28,599.20

Sl. No	Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
22	Direction and Place Identification Signs with size morethan 0.9 Size Board: Providing and erecting direction and place identification retro -reflectorised sign as per IRC:67 made of high i ntensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing.								
	KPWD S.R 2018-19	It. No.	24.4.	Pg.No.	180				
	Edge lane								
	Road Both Side	sqm	5		0.90	0.90		4.05	
							Total Qty	4.05	7557.80	30,609.09
								Total Constrution cost		1,67,49,922.31
								GST 12%		20,09,990.68
								Design Report,Proof Checking & PMC Amount		4,00,000.00
								Tender Primium 5%		8,37,496.12
								Sub Total		1,99,97,409.11
								Miscellaneous & Rounding Off		2,590.89
								Grand Total		2,00,00,000.00

Certificate:-

1. The workspot was inspected and work is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. The rates adopted based on the PWD SR Bangalore Circle for year 2018-19
4. The provisions made in the estimate are necessary and essential.

SRI SAI CONSULTANTS BANGALORE-90

Consultant
For Sri Sai Consultants

Assistant Engineer
Ward no. 03
BBMP - Bangalore

Assistant Executive Engineer
Yelahanka Sub Division
BBMP - Bangalore

Executive Engineer
Yelahanka Division
BBMP - Bangalore